Petr Broz

List of Publications by Year
in descending order

92 papers	14,207 citations	47006 47 h-index	48315 88 g-index
105 all docs	105 docs citations	105 times ranked	16089 citing authors

#	Article	IF	Citations
1	Regulation of Lytic and Non-Lytic Functions of Gasdermin Pores. Journal of Molecular Biology, 2022, 434, 167246.	4.2	39
2	Novel de novo pathogenic variant in the GNAI1 gene as a cause of severe disorders of intellectual development. Journal of Human Genetics, 2022, 67, 209-214.	2.3	2
3	Cell-Autonomous Defenses Against Intracellular Bacteria and Protozoa. , 2022, , .		0
4	Optogenetic activators of apoptosis, necroptosis, and pyroptosis. Journal of Cell Biology, 2022, 221, .	5.2	31
5	Activation and manipulation of inflammasomes and pyroptosis during bacterial infections. Biochemical Journal, 2022, 479, 867-882.	3.7	4
6	Detection of Gasdermin Activation and Lytic Cell Death During Pyroptosis and Apoptosis. Methods in Molecular Biology, 2022, , 209-237.	0.9	5
7	Novel <i>ZEB2â€PLAG1</i> fusion gene identified by RNA sequencing in a case of lipoblastoma. Pediatric Blood and Cancer, 2021, 68, e28691.	1.5	9
8	Active membrane rupture spurs a range of cell deaths. Nature, 2021, 591, 36-37.	27.8	11
9	RIPK1 activates distinct gasdermins in macrophages and neutrophils upon pathogen blockade of innate immune signaling. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	55
10	Guanylate-Binding Protein-Dependent Noncanonical Inflammasome Activation Prevents Burkholderia thailandensis-Induced Multinucleated Giant Cell Formation. MBio, 2021, 12, e0205421.	4.1	7
11	Genetic targeting of Card19 is linked to disrupted NINJ1 expression, impaired cell lysis, and increased susceptibility to Yersinia infection. PLoS Pathogens, 2021, 17, e1009967.	4.7	25
12	Case Report: Contiguous Xq22.3 Deletion Associated with ATS-ID Syndrome: From Genotype to Further Delineation of the Phenotype. Frontiers in Genetics, 2021, 12, 750110.	2.3	4
13	Pannexinâ€1 promotes NLRP3 activation during apoptosis but is dispensable for canonical or noncanonical inflammasome activation. European Journal of Immunology, 2020, 50, 170-177.	2.9	53
14	The gasdermins, a protein family executing cell death and inflammation. Nature Reviews Immunology, 2020, 20, 143-157.	22.7	881
15	Beyond inflammasomes: emerging function of gasdermins during apoptosis and NETosis. EMBO Journal, 2020, 39, e103397.	7.8	62
16	Performance of Targeted Library Preparation Solutions for SARS-CoV-2 Whole Genome Analysis. Diagnostics, 2020, 10, 769.	2.6	17
17	Cyclopentenone Prostaglandins and Structurally Related Oxidized Lipid Species Instigate and Share Distinct Pro- and Anti-inflammatory Pathways. Cell Reports, 2020, 30, 4399-4417.e7.	6.4	19
18	Caspase-8â€“dependent gasdermin D cleavage promotes antimicrobial defense but confers susceptibility to TNF-induced lethality. Science Advances, 2020, 6, .	10.3	123

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19	Electrophilic Nrf2 activators and itaconate inhibit inflammation at low dose and promote IL-1Î² production and inflammatory apoptosis at high dose. Redox Biology, 2020, 36, 101647.	9.0	37
20	Cross talk between intracellular pathogens and cell death. Immunological Reviews, 2020, 297, 174-193.	6.0	44
21	Human GBP1 binds LPS to initiate assembly of a caspase-4 activating platform on cytosolic bacteria. Nature Communications, 2020, 11, 3276.	12.8	178
22	Caspase-1 cleaves Bid to release mitochondrial SMAC and drive secondary necrosis in the absence of GSDMD. Life Science Alliance, 2020, 3, e202000735.	2.8	64
23	Global Ion Suppression Limits the Potential of Mass Spectrometry Based Phosphoproteomics. Journal of Proteome Research, 2019, 18, 493-507.	3.7	12
24	Divide to conquer: NLRP3 is activated on dispersed trans-Golgi network. Cell Research, 2019, 29, 181-182.	12.0	5
25	NLRP6 Deficiency in CD4 T Cells Decreases T Cell Survival Associated with Increased Cell Death. Journal of Immunology, 2019, 203, 544-556.	0.8	11
26	An integrative protocol for the structure determination of the mouse ASC-PYD filament. Methods in Enzymology, 2019, 625, 205-222.	1.0	0
27	Pannexin-1 channels bridge apoptosis to NLRP3 inflammasome activation. Molecular and Cellular Oncology, 2019, 6, 1610324.	0.7	4
28	Extrinsic and intrinsic apoptosis activate pannexinâ€1 to drive <scp>NLRP</scp> 3 inflammasome assembly. EMBO Journal, 2019, 38, .	7.8	264
29	Recognition of Intracellular Bacteria by Inflammasomes. Microbiology Spectrum, 2019, 7, .	3.0	29
30	A Surface-Induced Asymmetric Program Promotes Tissue Colonization by Pseudomonas aeruginosa. Cell Host and Microbe, 2019, 25, 140-152.e6.	11.0	127
31	<scp>LPS</scp> targets host guanylateâ€binding proteins to the bacterial outer membrane for nonâ€canonical inflammasome activation. EMBO Journal, 2018, 37, .	7.8	184
32	The Gasderminâ€D pore acts as a conduit for ILâ€1Î² secretion in mice. European Journal of Immunology, 2018, 48, 584-592.	2.9	273
33	Mechanisms and Consequences of Inflammasome Activation. Journal of Molecular Biology, 2018, 430, 131-132.	4.2	10
34	Detecting Release of Bacterial dsDNA into the Host Cytosol Using Fluorescence Microscopy. Methods in Molecular Biology, 2018, 1714, 199-213.	0.9	2
35	Function and mechanism of the pyrin inflammasome. European Journal of Immunology, 2018, 48, 230-238.	2.9	143
36	BAX/BAK-Induced Apoptosis Results in Caspase-8-Dependent IL-1Î² Maturation in Macrophages. Cell Reports, 2018, 25, 2354-2368.e5.	6.4	74

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37	ESCRT-dependent membrane repair negatively regulates pyroptosis downstream of GSDMD activation. Science, 2018, 362, 956-960.	12.6	466
38	Guanylate-binding protein 5 licenses caspase-11 for Gasdermin-D mediated host resistance to Brucella abortus infection. PLoS Pathogens, 2018, 14, e1007519.	4.7	67
39	Mobilizable Plasmids for Tunable Gene Expression in Francisella novicida. Frontiers in Cellular and Infection Microbiology, 2018, 8, 284.	3.9	4
40	Sensing of invading pathogens by GBPs: At the crossroads between cell-autonomous and innate immunity. Journal of Leukocyte Biology, 2018, 104, 729-735.	3.3	62
41	Noncanonical inflammasome signaling elicits gasdermin Dâ€"dependent neutrophil extracellular traps. Science Immunology, 2018, 3, .	11.9	425
42	Assay for high-throughput screening of inhibitors of the ASC-PYD inflammasome core filament. Cell Stress, 2018, 2, 82-90.	3.2	4
43	Francisella requires dynamic type VI secretion system and ClpB to deliver effectors for phagosomal escape. Nature Communications, 2017, 8, 15853.	12.8	75
44	Evolutionary Convergence and Divergence in NLR Function and Structure. Trends in Immunology, 2017, 38, 744-757.	6.8	123
45	The Inflammasome Drives GSDMD-Independent Secondary Pyroptosis and IL-1 Release in the Absence of Caspase-1 Protease Activity. Cell Reports, 2017, 21, 3846-3859.	6.4	202
46	IFN-Î³ extends the immune functions of Guanylate Binding Proteins to inflammasome-independent antibacterial activities during Francisella novicida infection. PLoS Pathogens, 2017, 13, e1006630.	4.7	41
47	Genome-wide Expression Profiling (with Focus on the Galectin Network) in Tumor, Transition Zone and Normal Tissue of Head and Neck Cancer: Marked Differences Between Individual Patients and the Site of Specimen Origin. Anticancer Research, 2017, 37, 2275-2288.	1.1	14
48	The gasdermin-D pore: Executor of pyroptotic cell death. Oncotarget, 2016, 7, 57481-57482.	1.8	15
49	Inflammasomes in Host Defense and Autoimmunity. Chimia, 2016, 70, 853.	0.6	6
50	<scp>GSDMD</scp> membrane pore formation constitutes the mechanism of pyroptotic cell death. EMBO Journal, 2016, 35, 1766-1778.	7.8	842
51	Aneuploidy Detection and mtDNA Quantification in Bovine Embryos with Different Cleavage Onset Using a Next-Generation Sequencing-Based Protocol. Cytogenetic and Genome Research, 2016, 150, 60-67.	1.1	9
52	K + Efflux-Independent NLRP3 Inflammasome Activation by Small Molecules Targeting Mitochondria. Immunity, 2016, 45, 761-773.	14.3	364
53	AIM2 inflammasome is activated by pharmacological disruption of nuclear envelope integrity. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4671-80.	7.1	106
54	Interferon-inducible GTPases in cell autonomous and innate immunity. Cellular Microbiology, 2016, 18, 168-180.	2.1	99

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55	ASC filament formation serves as a signal amplification mechanism for inflammasomes. Nature Communications, 2016, 7, 11929.	12.8	299
56	Inflammasomes: mechanism of assembly, regulation and signalling. Nature Reviews Immunology, 2016, 16, 407-420.	22.7	2,353
57	Inflammasomes: Intracellular detection of extracellular bacteria. Cell Research, 2016, 26, 859-860.	12.0	15
58	Sequence-specific solid-state NMR assignments of the mouse ASC PYRIN domain in its filament form. Biomolecular NMR Assignments, 2016, 10, 107-115.	0.8	12
59	Characteristics of Quinolone Resistance in Escherichia coli Isolates from Humans, Animals, and the Environment in the Czech Republic. Frontiers in Microbiology, 2016, 7, 2147.	3.5	53
60	Intracellular pathogens under attack. ELife, 2016, 5, .	6.0	0
61	Quantification of Cytosolic vs. Vacuolar Salmonella in Primary Macrophages by Differential Permeabilization. Journal of Visualized Experiments, 2015, , e52960.	0.3	14
62	Guanylate-binding proteins promote activation of the AIM2 inflammasome during infection with Francisella novicida. Nature Immunology, 2015, 16, 476-484.	14.5	291
63	Inflammasome assembly: The wheels are turning. Cell Research, 2015, 25, 1277-1278.	12.0	8
64	Caspaseâ€•11 activates a canonical NLRP3 inflammasome by promoting K⁺ efflux. European Journal of Immunology, 2015, 45, 2927-2936.	2.9	395
65	Structure and assembly of the mouse ASC inflammasome by combined NMR spectroscopy and cryo-electron microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 13237-13242.	7.1	133
66	Caspase target drives pyroptosis. Nature, 2015, 526, 642-643.	27.8	137
67	Interferon-Induced Guanylate-Binding Proteins Promote Cytosolic Lipopolysaccharide Detection by Caspase-11. DNA and Cell Biology, 2015, 34, 1-5.	1.9	25
68	Caspase-11 activation requires lysis of pathogen-containing vacuoles by IFN-induced GTPases. Nature, 2014, 509, 366-370.	27.8	416
69	Getting Rid of the Bad Apple: Inflammasome-Induced Extrusion of Salmonella -Infected Enterocytes. Cell Host and Microbe, 2014, 16, 153-155.	11.0	8
70	Toll-like Receptor and Inflammasome Signals Converge to Amplify the Innate Bactericidal Capacity of T Helper 1 Cells. Immunity, 2014, 40, 213-224.	14.3	90
71	Newly described pattern recognition receptors team up against intracellular pathogens. Nature Reviews Immunology, 2013, 13, 551-565.	22.7	395
72	Measuring Inflammasome Activation in Response to Bacterial Infection. Methods in Molecular Biology, 2013, 1040, 65-84.	0.9	20

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73	A Coupled Protein and Probe Engineering Approach for Selective Inhibition and Activity-Based Probe Labeling of the Caspases. Journal of the American Chemical Society, 2013, 135, 9130-9138.	13.7	31
74	Noncanonical Inflammasomes: Caspase-11 Activation and Effector Mechanisms. PLoS Pathogens, 2013, 9, e1003144.	4.7	67
75	Caspase-1 activity affects AIM2 speck formation/stability through a negative feedback loop. Frontiers in Cellular and Infection Microbiology, 2013, 3, 14.	3.9	13
76	Innate immune response to<i>Salmonella typhimurium</i>, a model enteric pathogen. Gut Microbes, 2012, 3, 62-70.	9.8	194
77	Caspase-11 increases susceptibility to Salmonella infection in the absence of caspase-1. Nature, 2012, 490, 288-291.	27.8	466
78	Caspase-1 activity is required to bypass macrophage apoptosis upon Salmonella infection. Nature Chemical Biology, 2012, 8, 745-747.	8.0	53
79	Innate Immune Recognition of Francisella Tularensis: Activation of Type-I Interferons and the Inflammasome. Frontiers in Microbiology, 2011, 2, 16.	3.5	34
80	Elevated AIM2-mediated pyroptosis triggered by hypercytotoxic Francisella mutant strains is attributed to increased intracellular bacteriolysis. Cellular Microbiology, 2011, 13, 1586-1600.	2.1	95
81	Molecular mechanisms of inflammasome activation during microbial infections. Immunological Reviews, 2011, 243, 174-190.	6.0	222
82	Redundant roles for inflammasome receptors NLRP3 and NLRC4 in host defense against<i>Salmonella</i>. Journal of Experimental Medicine, 2010, 207, 1745-1755.	8.5	491
83	Absent in melanoma 2 is required for innate immune recognition of <i>Francisella tularensis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9771-9776.	7.1	454
84	Differential Requirement for Caspase-1 Autoproteolysis in Pathogen-Induced Cell Death and Cytokine Processing. Cell Host and Microbe, 2010, 8, 471-483.	11.0	514
85	The type III secretion system tip complex and translocon. Molecular Microbiology, 2008, 68, 1085-1095.	2.5	207
86	YscU recognizes translocators as export substrates of the Yersinia injectisome. EMBO Journal, 2007, 26, 3015-3024.	7.8	97
87	Function and molecular architecture of the <i>Yersinia</i> injectisome tip complex. Molecular Microbiology, 2007, 65, 1311-1320.	2.5	129
88	Protective Antiâ€V Antibodies InhibitPseudomonasandYersiniaTranslocon Assembly within Host Membranes. Journal of Infectious Diseases, 2005, 192, 218-225.	4.0	111
89	The V-Antigen of Yersinia Forms a Distinct Structure at the Tip of Injectisome Needles. Science, 2005, 310, 674-676.	12.6	319
90	The Needle Length of Bacterial Injectisomes Is Determined by a Molecular Ruler. Science, 2003, 302, 1757-1760.	12.6	272

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91	Recognition of Intracellular Bacteria by Inflammasomes. , 0, , 287-297.		20
92	Viral protein activates the NLRP1 inflammasome. Nature Immunology, 0, , .	14.5	0